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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,941	03/16/2001	Satoru Araki	32014-170524	5291

7590 09/24/2004

Venable
P.O. Box 34385
Washington, DC 20043-9998

EXAMINER

BAYARD, EMMANUEL

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/808,941	Applicant(s) ARAKI, SATORU	
	Examiner Emmanuel Bayard	Art Unit 2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/16/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the abstract is too long and should be limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The term "its" in claims 1, 3-7, 9-11, 13, 15-17 is a relative term and renders the claim indefinite. It is not clear as to what "its" stand for. The term "its" must be defined and replaced by a proper. Appropriate correction is required.

Claims 2, 8, 12 and 18 are likewise rejected because it depends on a base rejected claim.

5. Claims 5, 17 recite the limitation "a third edge detector" in line 4. However there are no recitation of a first and second edge detectors in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim, 5, 11 and 17 recite the limitation "a third storage" in lines 18 and 19, respectively. However there are no recitation of a first and second storages in the claim. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2631

Claims 5 and 17 recite the limitation "a fourth comparator" in lines 30 and 31, respectively. However there are no recitation of a first, second and third comparators in the claim. There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

6. Claims 1-18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

7. The following is a statement of reasons for the indication of allowable subject matter: A set circuit which includes a first counter for counting a reference clock signal to generate a count value and clearing its own count value in response to the first detection signal, wherein the set circuit generates a set signal if the count value reaches the number of the reference clock signals corresponding to the delay period of time as recited in claims 1, 7 and 13. A read counter which counts the reference clock signal to generate a read count value, and resets its own read count value at a second initial value in response to the system reset signal, wherein the second initial value has a difference of a value added one to the number of the reference clock signals corresponding to the delay period of time between the first initial value as recited in claims 5, 11 and 17.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kawasaki et al U.S. patent No 5,220,201 teaches a phase locked signal generator.

Johnson et al U.S. patent No 6,341,146 B1 teaches a phase shift Keying demodulator.

Byrn et al U.S. patent no 5,977,837 teaches a phase selector.

Flake U.S. Patent No 6,665,359 B1 teaches a digital data separator.

Art Unit: 2631

Hongbin Hao et al U.S. patent No 6,218,869 B1 teaches a pulse detector.

Nishimura et al U.S. patent No 6,392,641 B1 teaches a PLL circuit for digital display.

O'Brien et al U.S. patent no 6,356,129 B1 teaches a Low jitter phase locked loop.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 571 272 3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/22/04

Emmanuel Bayard
Primary Examiner
Art Unit 2631

EMMANUEL BAYARD
PRIMARY EXAMINER

